BITTERROOT RIVER BASIN as of May 1, 1992

Mountain precipitation during April was about 145 percent of average brining the cumulative total since October 1 to about 85 percent of average. Snowmelt continues to progress about a month ahead of normal. As a result, snowpacks remain well below average in the 45 to 55 percent of average range. Reservoir storage levels are near to a little below average in Painted Rocks and Como Reservoirs. April streamflows were generally near average. Peak snowmelt runoff on the Bitterroot near Darby occurred near May 1 at about one-third of its normal peak. Streamflows for the remainder of the spring and summer months are forecast to be in the 40 to 60 percent of average range. The Surface Water Supply Index for the Bitterroot Basin is -2.7.

BITTERROOT RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions — Chance of Exceeding * — 50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
WF BITTERROOT nr Conner (2)							
MAY-JUL	25	42	54	40	66	83	134
MAY-SEP	29	47	59	40	71	90	148
BITTERROOT nr Darby							
MAY-JUL	94	148	184	42	220	275	435
MAY-SEP	130	184	220	45	255	310	484
ROCK CK nr Darby (2)							
MAY-JUL	30	36	40	58	44	50	69
MAY-SEP	33	39	43	59	47	54	73
SKALKAHO CK nr Hamilton							
MAY-JUL	17.0	22	25	58	28	33	43
MAY-SEP	22	27	31	62	35	40	50
BURNT FORK CK nr Stevensville (2)							
MAY-JUL	9.3	13.3	16.0	59	18.7	23	27
MAY-SEP	12.1	16.8	20	63	23	28	32
BITTERROOT at Missoula							
MAY-JUL	440	555	630	55	705	820	1149
MAY-SEP	515	635	715	56	795	915	1266

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

BITTERROOT RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********* Usable Storage ********* This Year	Last Year	Average
PAINTED ROCKS LAKE	31.7	20.5	9.9	20.0
COMO	34.9	17.1	18.4	20.2

BITTERROOT RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
WEST FORK BITTERROOT	6	48	45
EAST SIDE BITTERROOT	5	55	50
WEST SIDE BITTERROOT	6	56	53
BITTERROOT	17	53	50

LOWER CLARK FORK RIVER BASIN as of May 1, 1992

Mountain precipitation during April was a little above average bringing the cumulative total since October 1 to about 80 percent of average. Snowmelt continues to progress about a month ahead of normal. Basin-wide snowpacks are 40 to 55 percent of average inn the larger upstream river basins, and about 55 percent in the Lower Clark Fork River Basin. Storage in Noxon Reservoir is well above average. April streamflow volumes were below average on the Lower Clark Fork. The peak snowmelt runoff occurred near May 1 on the Clark Fork at St. Regis at about one-third of the average peak. Streamflows for the remainder of the spring and summer months are forecast to be in the 40 to 55 percent of average range. The Surface Water Supply Indices range from -2.8 to -2.9 on Lower Clark Fork Basin.

LOWER CLARK FORK RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
CLARK FORK ab Missoula							
MAY-JUL	395	560	675	53	790	955	1263
MAY-SEP	505	680	800	55	920	1100	1457
CLARK FORK bl Missoula							
MAY-JUL	860	1120	1300	54	1480	1740	2413
MAY-SEP	1050	1330	1520	56	1710	1990	2724
CLARK FORK at St. Regis (1)							
MAY-JUL	935	1420	1640	52	1860	2340	3152
MAY-SEP	1100	1640	1890	53	2140	2680	3561
CLARK FORK nr Plains (1,2)							
MAY-JUL	3910	4960	5430	60	5900	6950	9052
MAY-SEP	4390	5550	6080	60	6610	7770	10080
THOMPSON nr Thompson Falls							
MAY-JUL	24	50	67	40	84	110	169
MAY-SEP	45	71	89	45	107	133	196
PROSPECT CK at Thompson Falls							
MAY-JUL	25	36	44	47	52	63	94
MAY-SEP	38	50	58	56	66	78	103
CLARK FK at Whitehorse Rpds (1,2)							
MAY-JUL	3920	5160	5730	57	6300	7540	10020
MAY-SEP	4420	5810	6440	58	7070	8460	11200

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

LOWER CLARK FORK RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
NOXON RAPIDS	335.0	272.0	308.9	208.7

LOWER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
UPPER CLARK FORK	45	46	49
BITTERROOT	17	53	50
LOWER CLARK FORK	18	57	56
CLARK FORK TOTAL	74	50	51
FLATHEAD	33	43	57
PEND OREILLE	111	46	52

JEFFERSON RIVER BASIN as of May 1, 1992

Mountain precipitation during April was about 85 percent of average. Cumulative precipitation totals since October 1 remain at about 80 percent of average. Snowmelt continued to progress about a month ahead of normal. As a result, basin-wide snowpacks are below to well below average ranging from about 60 to 70 percent of average except on the Boulder River Drainage where snowpacks are about 40 percent of average. Soil moisture conditions have improved but remain drier than normal in the deeper soil profiles. Top soils in the snow-free lower elevations are also beginning to dry out. Ruby Reservoir has filled to capacity but elsewhere reservoir storage levels are below average. April streamflows were generally below average even though most streams reached their peak snowmelt flows in early May. Streamflows for the remainder of the spring and summer period are generally forecast to be in the 30 to 45 percent of average range on the Beaverhead and Boulder River Drainages and in the 70 to 80 percent of average range on the Big Hole and Ruby River Drainages. The Red Rock near Monida is forecast to have near record low flows. The Surface Water Supply Indices range from -2.2 on the Ruby River Basin to -3.5 on the Boulder River Basin.

JEFFERSON RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
RED ROCK RIVER near Monida (2)							
MAY-JUL	8.0	14.0	23	32	32	45	72
MAY-SEP	9.0	16.0	26	33	36	52	80
BEAVERHEAD RIVER near Grant (2)							
MAY-JUL	11.0	19.0	30	33	57	96	92
MAY-SEP	23	35	51	44	85	135	115
BEAVERHEAD RIVER at Barratts (2)							
MAY-JUL	15.0	25	50	40	79	121	124
MAY-SEP	31	46	79	51	112	161	155
RUBY RIVER near Alder							
MAY-JUL	36	48	56	77	64	77	73
MAY-SEP	44	59	69	78	79	94	89
BIG HOLE RIVER near Melrose							
MAY-JUL	255	345	405	73	465	555	555
MAY-SEP	285	385	455	74	525	625	612
BOULDER RIVER near Boulder							
MAY-JUL	8.0	21	32	43	44	60	75
MAY-SEP	11.0	22	35	43	48	67	81
WILLOW CREEK near Harrison							
MAY-JUL	1.8	4.4	8.2	54	12.0	17.6	15.1
MAY-SEP	2.8	5.9	10.1	58	14.3	21	17.4
JEFFERSON near Three Forks (2)							
MAY-JUL	124	355	515	69	675	905	749
MAY-SEP	158	425	605	72	785	1050	841

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

JEFFERSON RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
LIMA	84.0	40.2	28.4	55.1
CLARK CANYON	255.6	134.9	108.5	162.4
RUBY RIVER	38.8	37.3	34.2	36.3

JEFFERSON RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
BEAVERHEAD	22	63	59
RUBY	12	66	69
BIGHOLE	18	74	72
BOULDER	13	35	38
JEFFERSON	53	60	60

MADISON RIVER BASIN as of May 1, 1992

Mountain precipitation was near average during April. Cumulative precipitation since October 1 is about 80 percent of average. Snowmelt continued to progress about a month ahead of normal. Basin-wide snowpacks are now in the 55 to 65 percent of average range. Mountain soil moisture conditions have improved but the deeper soil profiles remain drier than normal. Surface soils in the snow-free lower elevations are beginning to dry out. Storage in Hebgen Lake is a little above average. Streamflows during April were above average and the peak snowmelt runoff occurred near May 1. Streamflows for the remainder of the season are expected to be below average at about 75 percent of average. The Surface Water Supply Index for the Madison River is -1.8.

MADISON RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
MADISON RIVER near Grayling (2)							
MAY-JUL	186	215	235	73	255	285	321
MAY-SEP	270	305	330	77	355	390	428
MADISON RIVER near McAllister (2)							
MAY-JUL	350	395	425	76	455	500	562
MAY-SEP	490	540	575	79	610	660	731

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

MADISON RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
ENNIS LAKE	41.0	32.8	32.5	35.1
HEBGEN LAKE	377.5	283.4	291.0	246.1

MADISON RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
MADISON above HEBGEN	9	59	54
LOWER MADISON	16	59	63
MADISON	25	59	59

GALLATIN RIVER BASIN as of May 1, 1992

Mountain precipitation was about 140 percent of average during April bringing the cumulative precipitation since October 1 to about 80 percent of average. Although precipitation amounts were above average, snowmelt continued to progress about a month ahead of normal. As a result, basin-wide snowpack conditions remained about the same as last month at about 65 percent of average. Soil moisture conditions have improved but the deeper soil profiles remain drier than normal. Storage in Middle Creek Reservoir is about 80 percent of average. April streamflows were above normal on the main Gallatin above Gateway but below average on the Gallatin near Logan. Streamflows for the remainder of the spring and summer season are expected to be below average at about 70 percent of average. Peak snowmelt flows are expected to occur in the early to mid-May period. The Surface Water Supply Index for the Gallatin Basin is -2.6.

GALLATIN RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<--- Drier --- Future Conditions --- Wetter ---> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
GALLATIN RIVER near Gateway							
MAY-JUL	245	270	290	71	310	335	409
MAY-SEP	305	335	355	73	375	405	486
HYALITE CREEK near Bozeman (2)							
MAY-JUL	16.0	20	23	70	26	30	33
MAY-SEP	21	25	28	72	31	35	39
GALLATIN RIVER at Logan							
MAY-JUL	173	245	290	68	335	405	429
MAY-SEP	235	310	360	70	410	485	512

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

GALLATIN RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
MIDDLE CREEK	8.0	3.9	5.4	4.8

GALLATIN RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
UPPER GALLATIN	10	63	65
EAST GALLATIN	8	62	67
GALLATIN	17	62	65

MAINSTEM MISSOURI RIVER BASIN as of May 1, 1992

Mountain precipitation during April was about 90 percent of average. Cumulative precipitation since October 1 stands at about 75 percent of average. Snowpacks in the Missouri headwater streams are in the 60 to 65 percent of average range. Snowpacks on the lower tributary basins are generally in the 35 to 55 percent of average range. Mountain soil moisture conditions have improved but the deeper soil profiles remain drier than normal. Reservoir storage levels are generally near average except in Fort Peck Reservoir which reports about 75 percent of average storage. April streamflows were generally below to well below average on the Missouri Mainstem. Streamflows for the remainder of the spring and summer period are expected to be in the 50-60 percent of average range on the Sun, Teton, Marias and most of the Missouri Mainstem, 30-45 percent of average on the Smith, Judith and Musselshell River Basins and about 70 percent of average on the Missouri Headwater streams. The Surface Water Supply Indices range from -1.3 to -2.3 on the Missouri Mainstem.

MAINSTEM MISSOURI RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
MISSOURI RIVER at Toston (2)							
MAY-JUL	795	1050	1220	71	1390	1640	1730
MAY-SEP	1000	1280	1470	71	1660	1940	2071
PRICKLY PEAR CREEK nr Clancy							
MAY-JUL	3.2	5.8	9.0	45	14.6	23	20
MAY-SEP	4.8	8.2	11.7	49	17.9	27	24
SUN RIVER at Gibson Dam (2)							
MAY-JUL	132	196	240	54	285	350	441
MAY-SEP	161	230	275	56	320	390	489
MISSOURI RIVER at Fort Benton (2)							
MAY-JUL	560	1160	1560	60	1970	2560	2597
MAY-SEP	860	1480	1910	60	2340	2960	3188
MARIAS RIVER near Shelby (2)							
MAY-JUL	77	121	200	52	280	395	387
MAY-SEP	94	146	210	49	295	415	428
MISSOURI RIVER at Virgelle (2)							
MAY-JUL	625	1320	1790	59	2260	2960	3030
MAY-SEP	920	1650	2150	59	2650	3380	3652
MISSOURI RIVER near Landusky (2)							
MAY-JUL	615	1420	1970	60	2520	3330	3279
MAY-SEP	950	1790	2370	60	2950	3790	3962
MISSOURI RIVER blw Fort Peck (2)							
MAY-JUL	230	1200	1860	56	2520	3490	3327
MAY-SEP	420	1470	2180	56	2890	3940	3908
LAKE SAKAKAWEA Inflow (2)							
MAY-JUL	2510	4430	5730	66	7030	8950	8681
MAY-SEP	3020	5020	6380	63	7740	9740	10130

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

MAINSTEM MISSOURI RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
CANYON FERRY LAKE	2043.0	1466.0	1439.0	1501.0
HELENA VALLEY	9.2	8.6	7.6	7.5
LAKE HELENA	10.4	10.9	11.1	10.1
HAUSER & HELENA	61.9	63.1	63.6	60.4
HOLTER LAKE	81.9	81.2	81.0	73.9
FORT PECK LAKE (MAF)	18.9	11.5	10.6	15.0

MAINSTEM MISSOURI RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
MISSOURI HEADWATERS	82	60	60
WEST SIDE MISSOURI	10	34	39
SMITH-BELT	8	46	57
MAINSTEM MISSOURI	18	41	48
SUN-TETON-MARIAS	17	22	37
JUDITH-MUSSELSHELL	12	36	54
MISSOURI above FORT PECK	118	49	56
MILK RIVER	10	18	26
MISSOURI in MONTANA	126	48	55
MISSOURI blw YELLOWSTONE	216	48	56

SMITH-JUDITH-MUSSELSHELL RIVER BASINS as of May 1, 1992

Mountain precipitation was about 145 percent of average during April bringing the cumulative total since October 1 to about 85 percent of average. Mountain snowpacks show little or no improvement, however, and remain well below average in the 50 to 60 percent of average range. Soil moisture levels are near average in the upper soil profiles but the deeper soil profiles are generally drier than normal. Reservoir storage levels are below average in the Smith River and Martinsdale Reservoirs and above average elsewhere. Streamflows during April were generally well below average. Streamflows for the remainder of the spring and summer period are forecast to be near record low flows in the 30 to 45 percent of average range. The Surface Water Supply Indices are -3.4 for the Smith River Basin and -0.1 for the Musselshell River Basin where most reservoir storage levels remain good.

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<--- Drier --- 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	--- Wetter ---> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
SMITH RIVER nr Ft. Logan							
MAY-JUL	10.0	16.0	23	43	36	55	53
MAY-SEP	13.0	21	31	48	45	66	64
SHEEP CK nr White Sulphur Springs							
MAY-JUL	3.3	5.6	7.2	44	8.8	11.1	16.3
MAY-SEP	5.4	7.9	9.7	51	11.5	14.0	19.2
NF MUSSELSHELL near Delpine							
MAY-JUL	0.6	0.9	1.3	34	1.9	2.8	3.8
MAY-SEP	0.8	1.2	1.6	35	2.3	3.4	4.6
SF MUSSELSHELL abv Martinsdale							
MAY-JUL	6.9	11.5	16.0	35	28	47	46
MAY-SEP	8.5	13.0	18.0	36	31	50	50

Chance of Exceeding *

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
SMITH RIVER	10.6	6.1	6.7	9.1
NEWLAN CREEK	12.4	10.9	9.7	8.8
BAIR	7.0	6.3	4.1	5.8
MARTINSDALE	23.1	9.9	9.4	12.4
DEADMAN'S BASIN	72.2	68.6	48.4	54.4

SMITH-JUDITH-MUSSELSHELL RIVER BASINS
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SMITH-BELT	8	46	57
JUDITH-MUSSELSHELL	12	36	54

SUN-TETON-MARIAS RIVER BASINS as of May 1, 1992

Mountain precipitation during April was about 85 percent of average. Cumulative precipitation since October 1 remains at about 75 percent of average. Snowpack conditions showed a significant decline in comparison to average due to the early snowmelt. Snowpacks are now at or near record low levels for May 1 with basin-wide snowpacks ranging from about 30 to 40 percent of average. Mountain soils generally have near average moisture contents but the snow-free lower elevation soils are beginning to dry out. Reservoir storage levels are near to above average. Streamflows for the remainder of the spring and summer period are expected to be well below average in the 50 to 60 percent of average range. Most streams have already reached their peak snowmelt flow levels. The Surface Water Supply Indices generally range from -2.3 to -3.1. One exception is on the Birch/Dupuyer Creek Drainages where a Surface Water Supply Index of -0.8 is reported.

SUN-TETON-MARIAS RIVER BASINS
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
SUN RIVER at Gibson Dam (2)							
MAY-JUL	132	196	240	54	285	350	441
MAY-SEP	161	230	275	56	320	390	489
TWO MEDICINE CREEK nr Browning (2)							
MAY-JUL	36	75	101	54	127	166	187
MAY-SEP	48	86	112	56	138	177	200
BADGER CREEK near Browning (2)							
MAY-JUL	23	40	52	56	64	81	93
MAY-SEP	34	52	64	58	76	94	110
SWIFT RESERVOIR Inflow nr Dupuyer							
MAY-JUL	16.0	28	36	59	44	57	61
MAY-SEP	25	37	46	63	55	68	73
DUPUYER CREEK near Valier							
MAY-JUL	2.5	4.2	6.4	49	12.4	21	13.1
MAY-SEP	3.0	5.1	7.2	48	13.4	23	15.0
CUT BANK CREEK at Cut Bank							
MAY-JUL	18.0	30	39	52	48	60	75
MAY-SEP	21	35	44	52	53	67	84
MARIAS RIVER near Shelby (2)							
MAY-JUL	77	121	200	52	280	395	387
MAY-SEP	94	146	210	49	295	415	428

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Forecast Period	Prior Future Conditions — Water Supply Forecast (1000AF)	Chance of Exceeding * 90% (1000AF)	70% (1000AF)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
MAY-JUL	132	196	240	54	285	750	441
MAY-SEP	141	230	275	55	320	870	489
MAY-JUL	58	75	101	56	127	188	187
MAY-SEP	68	86	112	56	138	117	200
MAY-JUL	23	40	52	56	66	81	93
MAY-SEP	34	52	80	52	76	94	110
MAY-JUL	16.0	28	36	50	64	37	61
MAY-SEP	25	37	56	63	85	63	73
MAY-JUL	2.5	4.2	8.4	62	12.6	27	13.1
MAY-SEP	3.0	5.1	7.2	68	13.6	23	15.4
MAY-JUL	18.0	30	39	52	68	60	78
MAY-SEP	21	35	46	52	72	67	84
MAY-JUL	17	121	200	32	260	395	385
MAY-SEP	94	140	210	49	285	415	439

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream water management.

SUN-TETON-MARIAS RIVER BASINS
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
GIBSON	99.1	63.4	62.2	57.2
PISHKUN	32.0	27.3	17.9	25.4
WILLOW CREEK	32.2	29.8	28.6	24.6
LOWER TWO MEDICINE LAKE	11.9	12.3	12.2	8.9
FOUR HORNS LAKE	19.2	13.1	9.2	12.8
SWIFT	30.0	20.4	8.1	18.3
LAKE FRANCES	112.0	85.5	94.6	77.6
LAKE ELWELL (TIBER)	1347.0	669.1	672.3	611.4

SUN-TETON-MARIAS RIVER BASINS
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SUN-TETON	12	19	33
MARIAS	6	25	41
SUN-TETON-MARIAS	17	22	37

ST. MARY and MILK RIVER BASINS as of May 1, 1992

Mountain precipitation was near average for April bringing the cumulative total since October 1 to about 80 percent of average. Snowpack conditions continued to deteriorate over the basin and are now in the 30 to 50 percent of average range in the headwater areas of the Milk and St. Mary. The Bear Paw Mountain snowpacks are now depleted. Reservoir storage levels are near to above average except in Lake Sherburne which reports about 35 percent of average storage. Streamflows during April were below to well below average. Streamflows for the remainder of the spring and summer period are forecast to be well below average. The Surface Water Supply Indices range from -2.7 for Milk River USBR project users to -3.5 for other users.

ST. MARY and MILK RIVER BASINS
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
SWIFTCURRENT CK at Sherburne (2)							
MAY-JUL	58	65	70	69	75	82	101
MAY-SEP	72	80	86	72	92	100	119
ST. MARY RIVER near Babb (2)							
MAY-JUL	199	235	260	68	285	320	383
MAY-SEP	245	285	315	70	345	385	453
MILK RIVER at Eastern Crossing							
MAY-SEP	128	154	185	94	197	215	197
MILK RIVER at Eastern Crossing (2)							
MAY-SEP	53	58	29	64	80	95	43

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

ST. MARY and MILK RIVER BASINS
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
LAKE SHERBURNE	64.3	7.5	14.8	20.8
FRESNO	127.0	83.0	80.0	95.8
BEAVER CREEK	3.5	3.3	3.2	2.5
NELSON	66.8	38.8	37.0	42.7

ST. MARY and MILK RIVER BASINS
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
MILK HEADWATERS	3	20	31
BEAR PAW	7	0	0
MILK RIVER	10	18	26
ST. MARY	10	35	48
ST. MARY and MILK	16	33	45
BOW RIVER in ALBERTA	8	40	60
OLDMAN RIVER in ALBERTA	6	19	32

UPPER YELLOWSTONE RIVER BASIN as of May 1, 1992

Mountain precipitation during April was about 155 percent of average bringing the cumulative total since October 1 to about 85 percent of average. The above average precipitation did bring some improvement to snowpack conditions through mid-April but this was offset by mild temperatures and above average snowmelt rates in the latter part of the month. As a result, basin-wide snowpack conditions continued to deteriorate somewhat during April and are now in the 60 to 70 percent of average range. Mountain soil moisture levels are generally near normal except in the snow-free lower elevations where soils are beginning to dry. Storage in Cooney Reservoir is above average due to the early snowmelt. Flows for the remainder of the spring and summer period are forecast to be below to well below average in the 60 to 80 percent of average range. Most major streams should reach peak flow conditions by mid to late May which is about 4-6 weeks earlier than normal. The Surface Water Supply Indices are now in the -1.8 to -2.4 range.

UPPER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
YELLOWSTONE at Lake Outlet							
MAY-JUL	245	295	330	61	365	415	538
MAY-SEP	370	430	470	62	510	570	756
YELLOWSTONE at Corwin Springs							
MAY-JUL	855	965	1040	69	1120	1230	1516
MAY-SEP	1070	1200	1280	69	1360	1490	1844
YELLOWSTONE RIVER near Livingston							
MAY-JUL	975	1100	1190	69	1280	1410	1737
MAY-SEP	1240	1380	1480	70	1580	1720	2123
SHIELDS RIVER near Livingston							
MAY-JUL	27	53	80	60	107	147	134
MAY-SEP	38	68	96	64	124	166	151
BOULDER RIVER at Big Timber							
MAY-JUL	188	230	255	79	280	320	322
MAY-SEP	205	245	275	79	305	345	350
W. ROSEBUD CREEK near Roscoe (2)							
MAY-JUL	35	41	46	77	51	57	60
MAY-SEP	50	56	61	79	66	73	77
STILLWATER RIVER nr Absarokee (2)							
MAY-JUL	260	325	370	78	415	480	474
MAY-SEP	345	405	450	79	495	555	569
CLARKS FORK RIVER near Belfry							
MAY-JUL	300	350	385	76	420	470	508
MAY-SEP	345	395	430	76	465	515	566
RED LODGE CK blw Cooney Res (2)							
MAY-JUL	5.0	18.0	27	71	36	49	38
MAY-SEP	15.0	28	37	76	46	59	49
YELLOWSTONE RIVER at Billings							
MAY-JUL	1840	2240	2520	76	2800	3200	3320
MAY-SEP	2300	2720	3000	76	3280	3700	3954

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream

water management.

UPPER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** This Year	Usable Storage Last Year	********* Average
MYSTIC LAKE	21.0	1.2	0.6	1.9
COONEY	27.4	23.3	16.7	19.4

UPPER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
YELLOWSTONE ab LIVINGSTON	17	55	60
SHIELDS	6	65	69
BOULDER-STILLWATER	6	52	64
CLARK'S FORK-ROCK CREEK	14	58	68
YELLOWSTONE above BIGHORN	39	54	63

LOWER YELLOWSTONE RIVER BASIN as of May 1, 1992

April precipitation over the mountain areas was about 115 percent of average bringing the cumulative precipitation totals since October 1 to about 90 percent of average. Basin-wide snowpack conditions are in the 50 to 60 percent of average range on the Bighorn and Powder River Basins and in the 70 to 75 average range on the Little Bighorn and Tongue River Drainages. Soil moisture levels are near average in the upper soil profiles while the deeper soils are drier than normal. Streamflows for the remainder of the spring and summer period are expected to be below to well below average ranging from about 50 percent of average on the Bighorn River near St. Xavier to about 75 percent of average on the Little Bighorn near Hardin. The Surface Water Supply Indices range from -1.4 to -2.2 over the basin.

LOWER YELLOWSTONE RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<--- Drier --- Future Conditions --- Wetter ---> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
YELLOWSTONE RIVER at Billings							
MAY-JUL	1840	2240	2520	76	2800	3200	3320
MAY-SEP	2300	2720	3000	76	3280	3700	3954
BIG HORN RIVER nr St. Xavier (2)							
MAY-JUL	360	555	760	50	965	1270	1508
MAY-SEP	420	620	835	50	1050	1370	1673
LITTLE BIGHHORN RIVER nr Hardin							
MAY-JUL	16.0	60	89	75	118	162	118
MAY-SEP	17.0	64	96	71	128	175	135
TONGUE RIVER near Decker (2)							
MAY-JUL	39	98	137	67	177	235	204
MAY-SEP	48	110	152	67	194	255	227
YELLOWSTONE at Miles City (2)							
MAY-JUL	1860	2700	3270	66	3840	4680	4957
MAY-SEP	2370	3270	3870	66	4470	5370	5835
POWDER RIVER at Moorhead							
MAY-JUL	29	58	112	61	166	245	183
MAY-SEP	35	75	131	64	188	270	204
POWDER RIVER near Locate							
MAY-JUL	32	60	125	59	190	285	211
MAY-SEP	37	78	147	63	215	315	234
YELLOWSTONE RIVER nr Sidney (2)							
MAY-JUL	1880	2850	3500	68	4150	5120	5153
MAY-SEP	1070	2860	4080	68	5300	7090	5988

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

LOWER YELLOWSTONE RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********** This Year	Last Year	Average
BIGHORN LAKE	1356.0	804.7	722.4	789.2
TONGUE RIVER	68.0	27.4	13.3	36.6

LOWER YELLOWSTONE RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
BIG HORN (Wyoming)	50	42	51
LITTLE BIGHORN	4	61	73
TONGUE RIVER (Wyoming)	15	57	72
POWDER RIVER (Wyoming)	11	47	62
YELLOWSTONE RIVER	100	48	58

MONTANA Water Supply Outlook Report as of May 1, 1992

Mountain precipitation during April ranged from a little below average in northwestern Montana to well above average in the central and south-central parts of the state. Cumulative precipitation since October 1 now stands in the 75 to 85 percent of average range over most mountainous areas of the state. Snowmelt continued to progress 4 to 6 weeks ahead of normal. Basin-wide snowpacks are well below average with most basins reporting remaining snowpacks less than 60 percent of average. Reservoir storage levels are generally good. However, some reservoirs report below average storage. Streamflows for the remainder of the spring and summer period are forecast to be below to well below average with some basins having near record low forecasts. Most Surface Water Supply Indices remain in the moderately dry to extremely dry categories.

SNOWPACK

Below average snow accumulations continued over most of the mountainous regions of the state during April. As a result, most mountain snowpacks continued to significantly decline in comparison to normal. Snowpacks are now well below average across most of the state with many areas reporting less than half of average amounts of snow. However, snowpack conditions remained the same or showed a slight improvement in areas of central and south-central Montana which received above to well above average amounts of precipitation. West of the Divide, basin-wide snowpacks are generally in the 40 to 55 percent of average range. The exceptions are found in the Mission Valley, Swan River and South Fork Flathead River Basins where 60 to 70 percent of average snowpacks are reported. East of the Divide, snowpack conditions are generally in the 60 to 75 percent of average on the Jefferson, Madison, Gallatin and Upper Yellowstone River Basins, 50 to 60 percent of average on the Smith, Judith, and Musselshell River Basins and 25 to 40 percent of average on the Milk, Sun, Teton, and Marias River Basins. Snowpacks in the Lower Yellowstone tributary basins in Wyoming are generally in the 60 to 75 percent of average range except on the Bighorn River Basin which reports about 50 percent of average conditions. Snowmelt continues to be 4 to 6 weeks ahead of normal and most mountain snowpacks will be nearly depleted by late May or early June if the warm weather patterns continue.

PRECIPITATION

Precipitation amounts varied from below average to well above average across the mountainous areas of Montana during April. West of the Divide, precipitation amounts were in the 85 to 95 percent of average range on the Kootenai, Flathead and Upper Clark Fork River Basins, about 115 percent of average on the Lower Clark Fork River Basin and about 145 percent of average on the Bitterroot River Basin. East of the Divide, mountain precipitation was generally in the 85 to 95 percent of average for the month except in the central and south-central areas of the state where well above average amounts were reported. The Smith, Judith, Musselshell, Gallatin and Upper Yellowstone River Basins all reported between 140 to 155 percent of average precipitation. Cumulative precipitation totals since October 1 are now in the 75 to 85 percent of average range across the state. Precipitation amounts on the Lower Yellowstone tributaries in Wyoming were about 115 percent of average for April bringing the cumulative totals since October 1 to about 90 percent of average.

RESERVOIRS

Irrigation reservoir storage levels are reported to be well below average in Lake Sherburne, Smith River and the combined storage of the eight Mission Valley Reservoirs. Below average storage levels are also reported in Nevada Creek, Como, Lima, Clark Canyon, Middle Creek, Martinsdale and Tongue River Reservoirs. Elsewhere, irrigation reservoirs generally have near to above average storage levels with about half of them being near full capacity. Low runoff conditions and increasing demands for water will result in most irrigation reservoirs being drafted earlier than normal. The larger multipurpose reservoirs also have near to above average contents except Ft. Peck which is about 75 percent of average.

STREAMFLOW

April streamflows were generally below to well below normal across most of Montana. Near to above average flows, however, were reported on the Flathead, Madison, Gallatin and Upper Yellowstone River Basins. Streamflows for the remainder of the spring and summer period are forecast to be below to well below average throughout the state with some forecasts expected to be near record low. West of the Divide, streamflows are generally forecast to be in the 40 to 60 percent of average range except on the Kootenai Mainstem and the Flathead Rivers where forecasts are about 70 percent of average. The lowest forecasts are found in the Bitterroot and Upper Clark Fork River Basins. East of the Divide, streamflows are expected to be the lowest in the Red Rock, Beaverhead, Smith, Judith and Musselshell River Basins where forecasts are in the 30 to 40 percent of average range. In contrast, the Big Hole, Ruby, Madison, Gallatin and Upper Yellowstone River Basins have streamflow forecasts in the 70 to 80 percent of average range. Elsewhere, forecasts are generally in the 40 to 60 percent of average range.

SOIL MOISTURE

Mountain soil moisture conditions continue to improve over most areas of the state as a result of melting snow and near to above average precipitation. Top soils are generally near water-holding capacity except at the lower snow-free elevations where soils are beginning to dry out. The deeper soil zones, however, generally remain drier than normal.

SURFACE WATER SUPPLY INDEX

The Surface Water Supply Index (SWSI) is a measure of available surface water supplies during the spring and summer months. The index ranges from -4.0 to +4.0. A SWSI of -4.0 represents an extremely dry situation, 0 is near a normal situation and +4.0 represents an extremely wet situation. The SWSI provides a scale to evaluate various levels of wetness or dryness and water supply conditions across the state. The SWSI takes into account snowpack, mountain precipitation, soil moisture and available reservoir storage.

SWSI Scale

SWSI	DESIGNATION
+3.0 to +4.0	Extremely wet
+2.0 to +3.0	Moderately wet
+1.0 to +2.0	Slightly wet
-1.0 to +1.0	Near average
-1.0 to -2.0	Slightly dry
-2.0 to -3.0	Moderately dry
-3.0 to -4.0	Extremely dry

SWSIs as of May 1 for the remainder of the 1992 irrigation season are generally in the moderately to extremely dry range. Some basins with good reservoir storage levels, however, have SWSIs in the near average to slightly dry range. SWSIs for the major river basins in Montana are as follows:

SWSI	Basin
-3.1	Kootenai River at Ft. Steele (Kootenay in Canada)
-3.2	Tobacco River
-3.7	Kootenai Ft. Steele to Libby Dam
-0.9	Kootenai River below Libby Dam
-3.5	Fisher River
-3.7	Yaak River
-3.6	N. Fk. Flathead River
-3.3	Middle FK Flathead River
-2.1	S. Fk. Flathead River
-3.0	Flathead River at Columbia Falls
-3.5	Stillwater/Whitefish Rivers
-3.3	Swan River
-2.8	Flathead River at Polson
-3.2	Mission Valley
-1.1	Little Bitterroot River
-3.4	Clark Fork River above Rock Creek
-2.7	Blackfoot River
-2.7	Bitterroot River
-3.0	Clark Fork River above Missoula
-2.9	Clark Fork River below Bitterroot River
-2.8	Clark Fork River below Flathead River
-3.0	Beaverhead River
-2.2	Ruby River
-2.3	Big Hole River
-3.5	Boulder River (Jefferson)
-2.5	Jefferson River
-1.8	Madison River
-2.6	Gallatin River
-2.3	Missouri River above Canyon Ferry
-1.3	Missouri River below Canyon Ferry
-3.4	Smith River
-2.4	Sun River
-3.1	Teton River
-0.8	Birch/Dupuyer Creeks
-2.3	Marias River
-0.1	Musselshell River
-1.6	Missouri River above Ft. Peck
-1.6	Missouri River below Ft. Peck
-2.7	Milk River (USBR users)
-3.5	Milk River (other users)
-2.2	Yellowstone River above Livingston
-1.7	Shields River
-2.0	Boulder River (Yellowstone)
-2.4	Stillwater River
-1.8	Rock/Red Lodge Creeks
-1.9	Clarks Fork River
-2.2	Yellowstone River above Bighorn River
-1.4	Bighorn River below Bighorn Lake
-2.1	Little Bighorn River
-1.8	Yellowstone River below Bighorn River
-2.0	Tongue River
-2.2	Powder River

PEAK FLOWS

Estimates of peak snowmelt flow ranges for unregulated streams are as follows:

May 1, 1992
ESTIMATE OF PEAK SNOWMELT RUNOFF

	Peak Day Range in CFS	1961-90 AVG CFS
COLUMBIA RIVER DRAINAGE		
Blackfoot R nr Bonner	4,023*	9,072
Clark Fk R ab Missoula	5,296*	15,684
Bitterroot R nr Darby	1,990*	5,869
Clark Fk R bl Missoula	11,943*	30,257
Clark Fk R at St. Regis	16,000*	37,923
N Fk Flathead R nr Columbia Falls	10,700*	20,478
M Fk Flathead R nr West Glacier	12,000*	21,973
MISSOURI RIVER DRAINAGE		
Big Hole R nr Melrose	1,500-4,000	7,382
Ruby R ab Reservoir	300-700	989
Gallatin R nr Gateway	2,000-3,200	5,189
Gallatin R nr Logan	2,100*	5,314
Missouri R at Toston	4,860*	17,864
Marias R nr Shelby	2,000**	10,282
S Fk Musselshell R ab Martinsdale	150-300	1,229
YELLOWSTONE RIVER DRAINAGE		
Yellowstone R at Corwin Springs	8,500-13,500	16,880
Yellowstone R at Livingston	10,000-15,000	19,827
Boulder R nr Big Timber	1,000-2,500	5,035
Stillwater R nr Absarokee	1,500-4,000	6,307
Clarks Fk nr Belfry	3,000-5,000	7,466
Yellowstone R at Billings	15,000-26,000	40,887

*Reached snowmelt peak near May 8 at about the listed flow.
**Reached snowmelt peak near May 1 at about the listed flow.

The lower range represents the maximum daily flow that would be expected to occur with little rainfall during the peak snowmelt period. The higher range could be expected with moderate amounts of rain about the same time as maximum snowmelt runoff is occurring.

Due to the low snowpack conditions, 1992 peak flows are projected to be well below average across the state and 4 to 6 weeks earlier than normal. Many streams will have near record low peaks if little rainfall occurs during the remainder of the snowmelt period. Most streams west of the Divide reached peak snowmelt runoff near May 8. The peak flows were about a third of the average peak. East of the Divide, most snow-fed streams in southwestern, central and north-central Montana also reached peak snowmelt runoff near May 8. Streams in the Gallatin and Upper Yellowstone River Basins are expected to reach peak snowmelt runoff in late May or early June assuming near average temperatures and precipitation for the remainder of the month. Peak flows are expected to be well below average.

KOOTENAI RIVER BASIN in Montana as of May 1, 1992

Mountain precipitation during April was about 85 percent of average. Cumulative precipitation since October is about 75 percent of average. Snowmelt continues to progress about 1 month ahead of normal. As a result, basin-wide snowpacks are well below average in the 40 to 50 percent of average range except on the Tobacco River and East Kootenai River Basin in Canada which report about 60 percent of average snowpacks. Storage in Lake Koocanusa is near average. April streamflows were near average on the Kootenai Mainstem and below to well below average on the tributaries in Montana. Streamflows for the remainder of the spring and summer months are forecast to be in the 40 to 60 percent of average range on the tributary streams and 70 to 80 percent on the Kootenai Mainstem. The Surface Water Supply Indices range from -3.2 to -3.7 on the tributary streams and is -0.9 for the Kootenai Mainstem below Libby Dam.

KOOTENAI RIVER BASIN in Montana
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
TOBACCO nr Eureka							
MAY-JUL	51	61	67	61	73	83	110
MAY-SEP	58	69	77	62	85	96	124
KOOTENAI bl Libby Dam (1,2)							
MAY-JUL	3500	4150	4450	84	4750	5400	5301
MAY-SEP	4170	4940	5290	84	5640	6410	6294
FISHER nr Libby							
MAY-JUL	44	58	68	42	78	92	163
MAY-SEP	54	69	79	44	89	104	179
YAAK nr Troy							
MAY-JUL	137	175	200	54	225	265	372
MAY-SEP	154	193	220	56	245	285	394
KOOTENAI at Leonia (1,2)							
MAY-JUL	4060	4850	5210	84	5570	6360	6223
MAY-SEP	4730	5660	6080	83	6500	7430	7304

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

KOOTENAI RIVER BASIN in Montana
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
LAKE KOOCANUSA	5748.0	2523.0	1225.0	2409.0

KOOTENAI RIVER BASIN in Montana
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
EAST KOOTENAI in B.C.	24	43	59
KOOTENAI MAINTSTEM in MT	21	38	47
TOBACCO	3	42	59
FISHER	6	41	44
YAAK	10	33	42
KOOTENAI in MT	28	38	46
KOOTENAI ab Bonners Ferry	52	40	51

FLATHEAD RIVER BASIN as of May 1, 1992

Mountain precipitation during April was near average. The cumulative precipitation since October 1 is about 80 percent of average. Mountain snowpacks continued to deteriorate as a result of the early snowmelt. Basin-wide snowpacks generally range from 55 to 70 percent of average on the higher elevational basins while the lower elevational basins report snowpacks less than half of average. Soil moisture conditions have improved but the deeper soil profiles are drier than normal. Reservoir storage levels are near to above average except for the combined storage of the eight Mission Valley Reservoirs which are below average. April flows on the Flathead River and Swan Rivers were generally near average. Peak snowmelt runoff occurred near May 1 on the major rivers in the basin. Streamflows for the remainder of of the spring and summer are forecast to be in the 65 to 70 percent of average range on the Flathead and Swan River systems while the smaller low elevation tributaries are forecast to be about 50 percent of average. The Surface Water Supply Indices are generally in the -2.8 to -3.6 range except for South Fork Flathead and Little Bitterroot River Basins where the Surface Water Supply Indices are -2.1 and -1.1 respectively.

FLATHEAD RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
NF FLATHEAD nr Columbia Falls							
MAY-JUL	870	960	1020	69	1080	1170	1474
MAY-SEP	985	1090	1160	70	1230	1330	1648
MF FLATHEAD nr West Glacier							
MAY-JUL	800	920	1000	69	1080	1200	1454
MAY-SEP	900	1030	1120	70	1210	1340	1604
SF FLATHEAD nr Columbia Fls (1,2)							
MAY-JUL	990	1140	1210	68	1280	1430	1777
MAY-SEP	1050	1240	1320	69	1400	1590	1911
FLATHEAD at Columbia Falls (2)							
MAY-JUL	2760	3070	3280	68	3490	3800	4816
MAY-SEP	3100	3460	3700	70	3940	4300	5294
STILLWATER nr Whitefish							
MAY-JUL	59	70	78	50	86	97	155
MAY-SEP	69	82	91	52	100	113	174
WHITEFISH nr Kalispell							
MAY-JUL	38	45	50	54	55	62	92
MAY-SEP	46	52	57	54	62	68	105
SWAN nr Bigfork							
MAY-JUL	285	320	345	70	370	405	491
MAY-SEP	335	380	410	71	440	485	574
FLATHEAD nr Polson (1,2)							
MAY-JUL	2920	3430	3660	66	3890	4400	5578
MAY-SEP	3150	3790	4080	67	4370	5010	6114

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

FLATHEAD RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
CAMAS (4)	45.2	36.3	41.0	28.5
MISSION VALLEY (8)	100.0	32.7	28.6	49.7
HUNGRY HORSE	3451.0	2074.0	1648.0	2043.0
FLATHEAD LAKE	1791.0	873.8	1011.0	937.2

FLATHEAD RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
NORTH FORK FLATHEAD	11	40	55
MIDDLE FORK FLATHEAD	7	32	46
SOUTH FORK FLATHEAD	6	48	60
STILLWATER-WHITEFISH	9	36	47
SWAN	12	56	68
MISSION VALLEY	7	58	70
LITTLE BITTERROOT-ASHLEY	10	9	11
JOCKO	7	63	71
FLATHEAD	46	43	56

UPPER CLARK FORK RIVER BASIN as of May 1, 1992

Mountain precipitation was about 90 percent of average for April. Cumulative precipitation since October 1 is about 75 percent of average. Snowpacks continue to be depleted by the early snowmelt patterns and basin-wide snowpacks are now in the 40 to 55 percent of average range. Deep soil profiles remain drier than normal and top soils in the snow-free lower elevations are beginning to dry out much earlier than normal. Reservoir storage levels are above average with the exception of Nevada Creek Reservoir which reports below average storage levels. April streamflows were generally well below average even though most streams reached their peak snowmelt flows near May 1. Streamflows for the remainder of the spring and summer period are expected to be well below average with some of the smaller tributary streams forecast to be near record low flows. Forecasts are generally in the 30 to 60 percent of average range. The Surface Water Supply Indices range from -2.7 to -3.4.

UPPER CLARK FORK RIVER BASIN
Streamflow Forecasts - May 1, 1992

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
MOULTON RES inflow (million gal.)							
MAY-JUN	17.0	34	40	23	62	95	172
MAY-JUL	23	36	60	31	85	121	195
WARM SPRINGS CK at Anaconda (2)							
MAY-JUL	11.0	17.0	21	58	25	31	36
MAY-SEP	16.0	23	27	61	31	38	44
LITTLE BLACKFOOT nr Garrison							
MAY-JUL	8.0	14.0	30	43	46	70	69
MAY-SEP	11.0	18.0	35	46	52	77	76
FLINT CK nr Southern Cross (2)							
MAY-JUL	1.8	4.1	6.0	50	7.9	10.8	12.1
MAY-SEP	2.9	4.9	7.1	48	9.6	13.2	14.7
FLINT CK bl Boulder Ck							
MAY-JUL	12.0	22	29	58	36	46	50
MAY-SEP	19.0	32	40	61	48	61	66
LOWER WILLOW CK RES inflow							
MAY-JUL	1.4	2.4	4.2	37	6.0	8.6	11.4
MAY-SEP	2.0	2.9	4.8	39	6.7	9.4	12.3
MF ROCK CK nr Philipsburg							
MAY-JUL	25	32	37	60	42	49	62
MAY-SEP	30	38	43	62	48	56	69
ROCK CK nr Clinton							
MAY-JUL	82	112	133	50	154	184	264
MAY-SEP	104	137	159	53	181	215	300
NEVADA CK nr Finn							
MAY-JUL	1.5	2.5	5.3	35	8.1	12.3	15.2
MAY-SEP	2.2	3.5	6.5	38	9.5	14.0	16.9
CLEARWATER nr Clearwater							
MAY-JUL	57	70	79	59	88	101	133
MAY-SEP	58	75	86	61	98	115	142
BLACKFOOT nr Bonner							
MAY-JUL	285	360	410	57	460	535	714
MAY-SEP	350	430	480	60	530	610	805

CLARK FORK ab Milltown							
MAY-JUL	110	189	265	48	340	450	549
MAY-SEP	150	240	325	50	410	530	652
CLARK FORK ab Missoula							
MAY-JUL	395	560	675	53	790	955	1263
MAY-SEP	505	680	800	55	920	1100	1457

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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(2) - The value is natural flow - actual flow may be affected by upstream water management.

UPPER CLARK FORK RIVER BASIN
Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
GEORGETOWN LAKE	31.0	28.7	29.8	24.9
LOWER WILLOW CREEK	4.9	4.1	3.5	3.3
NEVADA CREEK	12.6	8.2	9.8	10.2

UPPER CLARK FORK RIVER BASIN
Watershed Snowpack Analysis - May 1, 1992

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
CLARK FORK ab FLINT CREEK	20	46	49
FLINT CREEK	10	46	42
ROCK CREEK	3	56	52
CLARK FORK ab BLACKFOOT	33	42	44
BLACKFOOT	15	51	56
UPPER CLARK FORK	45	46	49